

# **Nueces Delta Landform and Hydraulic Modifications: Phase II – Verification and Feasibility Assessment**

**Presentation to the Nueces Estuary Advisory Council  
May 1, 2017**

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**Naismith/Hanson**

Engineering | Planning | Architecture | Allied Services

*Now a part of Hanson Professional Services, Inc.*



# Project Objectives

**To evaluate the feasibility of constructing water control structures and diversion channels at two locations on Rincon Bayou to increase the area and duration of freshwater inundation of adjacent wetland areas during Freshwater Inflow Pass-Thru Pumping Events.**



# **Project Team**

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- **Naismith-Hanson**
  - **Grant Jackson, P.E., Principal**
  - **Terry Smith, P.G., Project Manager**
  - **Chemaine Koester, Senior Biologist**
  - **Kara Thompson, Biologist**
  - **Jay Gardner, Biologist**
  - **Harrison McNeil, Biologist**
- **Vega Environmental**
- **Coastal Environments, Inc.**
- **Ben Hodges, Ph.D.**
- **James Dodson**

## **Project Tasks:**

**Task 1: Desktop Review of Environmental Issues and Field Plan Preparation**

**Task 2: Archeological Desktop Assessment**

**Task 3: Development of Data Collection Procedures to Evaluate Hydrologic Suitability**

**Task 4: Field Work – Endangered Species, Nesting Bird and Shorebird Evaluations; Habitat Characterization; Wetland Delineation; and Collection of Selected Elevation Data Points**

**Task 5: Data Compilation, Planning, Preliminary Engineering and Regulatory Agency Coordination**

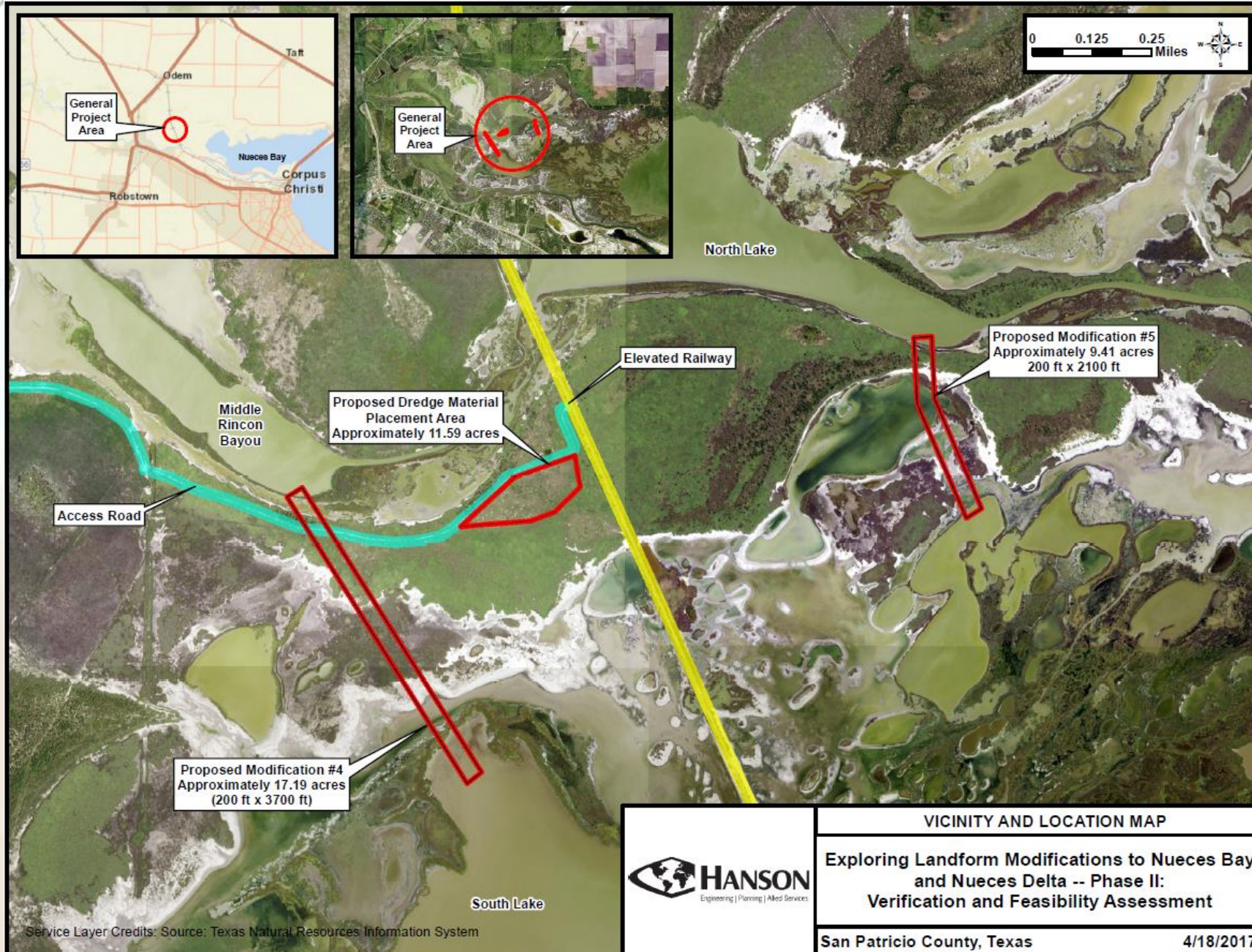
**Task 6: Final Report Preparation**

# Project Timetable:

Date	Tasks	Task #
Sept-Oct	<ul style="list-style-type: none"> <li>Desktop review</li> <li>Access plan and landowner coordination</li> <li>Archeological report</li> </ul>	1 1 2
Nov-Dec	Conduct field work: <ul style="list-style-type: none"> <li>Wetland delineations; channel cross section elevations and other selected elevations; habitat and soil characterizations; proposed DMPA site identification; photograph sites and prepare photograph logs; evaluate for T&amp;E species</li> </ul>	4
Jan-Feb	<ul style="list-style-type: none"> <li>Compile data -- underway</li> <li>Evaluate elevation data (Hodges)</li> <li>Create maps and channel cross sections -- underway</li> <li>Schedule and participate in JEM (<a href="#">JEM scheduled for 5-2-17</a>)</li> </ul>	5 3 5 5
Mar-Apr	<ul style="list-style-type: none"> <li>Prepare draft report -- underway</li> <li>Compile information from nesting bird and shorebird evaluations (PIPL and REKN)</li> </ul>	6 4
May - Jun	Complete draft report and submit to TWDB for review	6
July - Aug	Revise draft report as needed and submit final report to TWDB	6



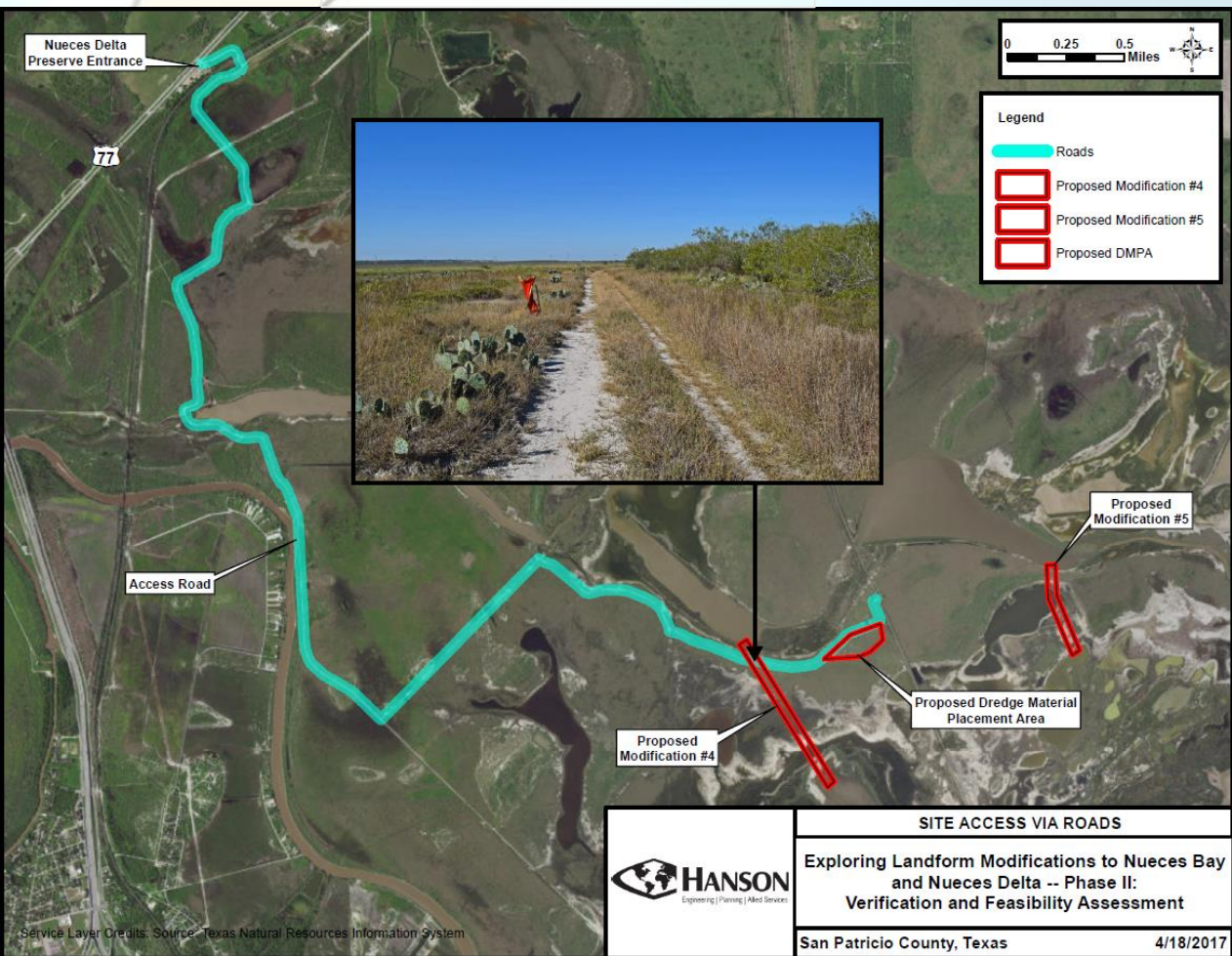
# Site Overview



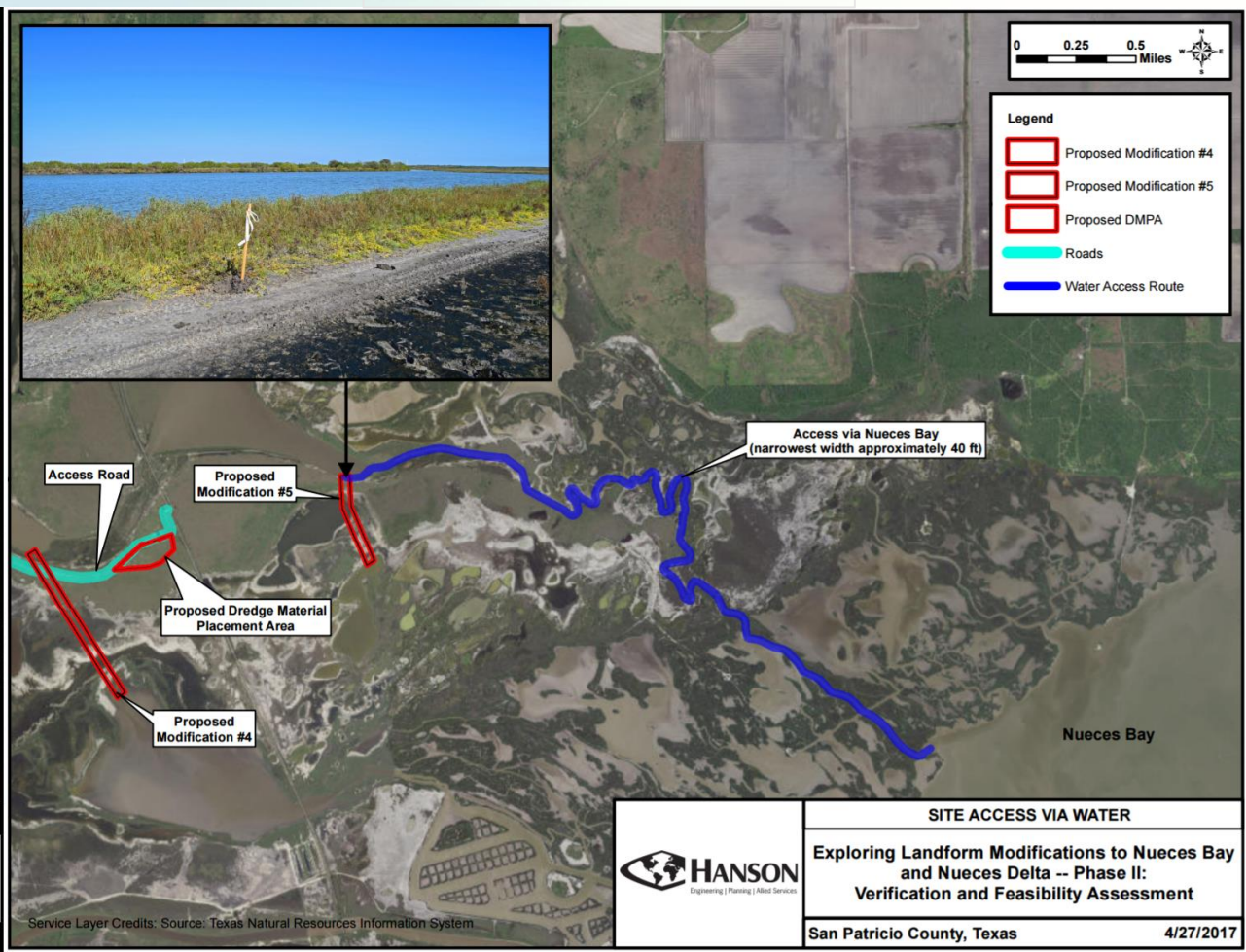


# Site Access Assessment

## Site Access Via Roads



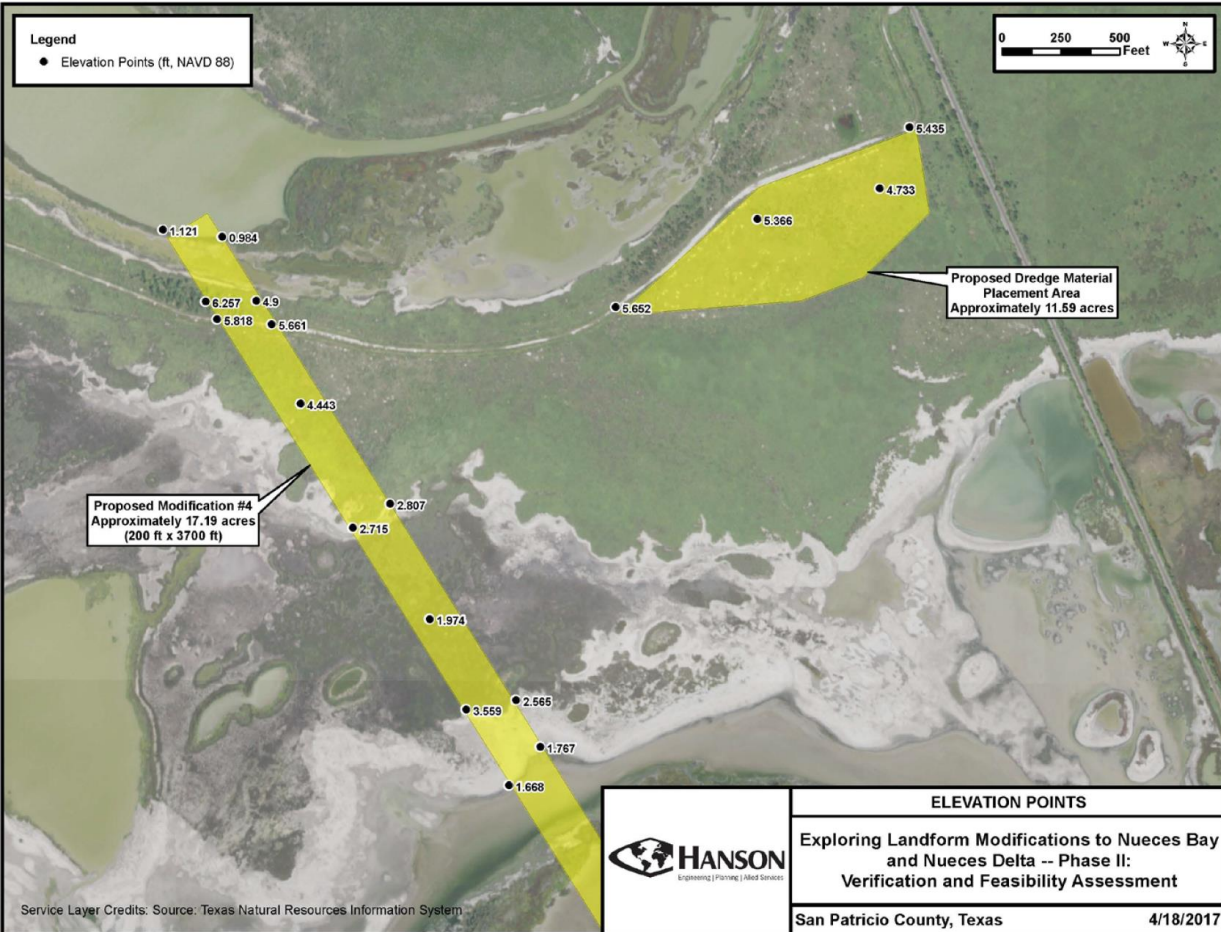
## Site Access Via Water



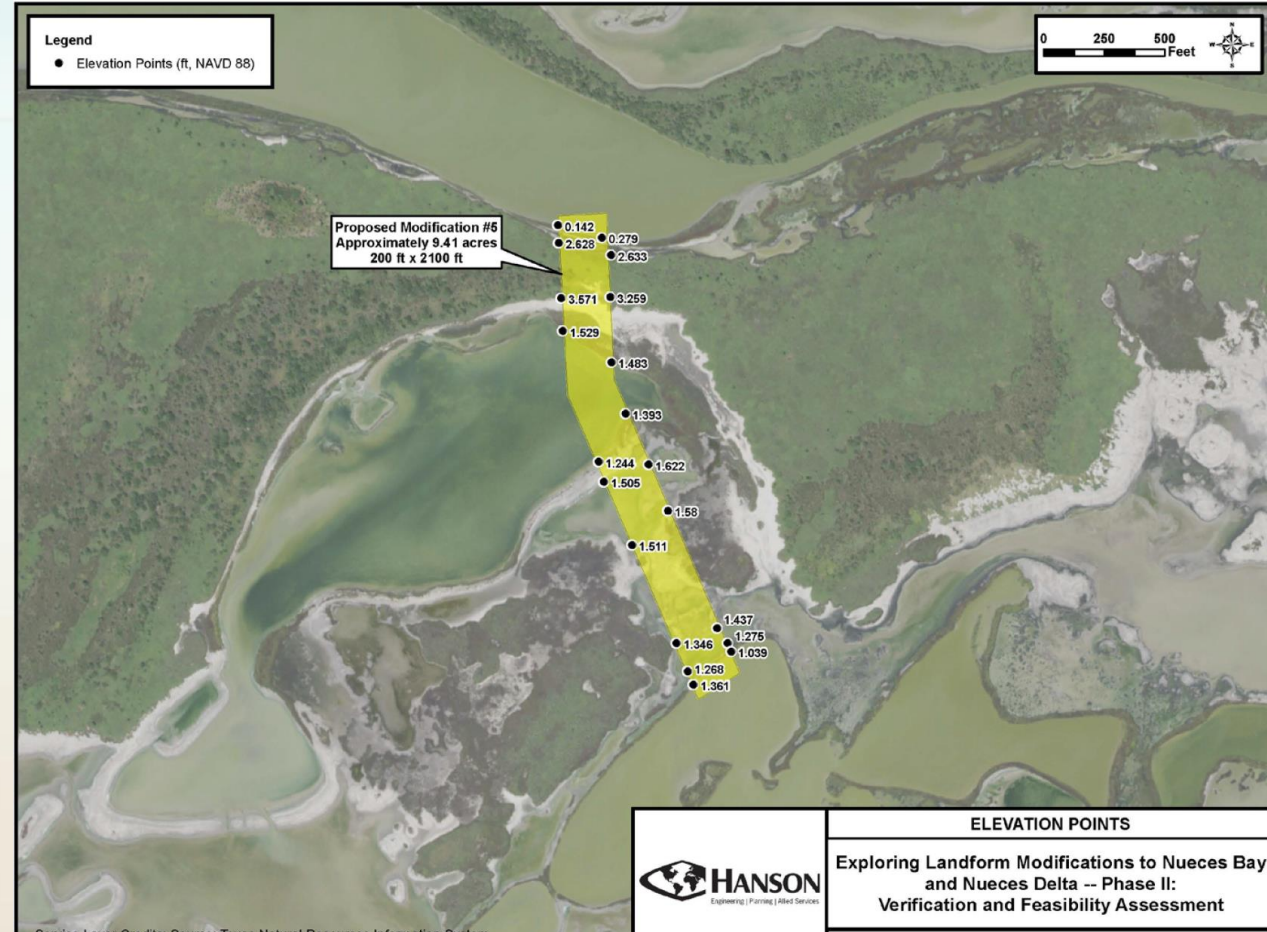


# GIS/Elevation Data Collection

## Site #4

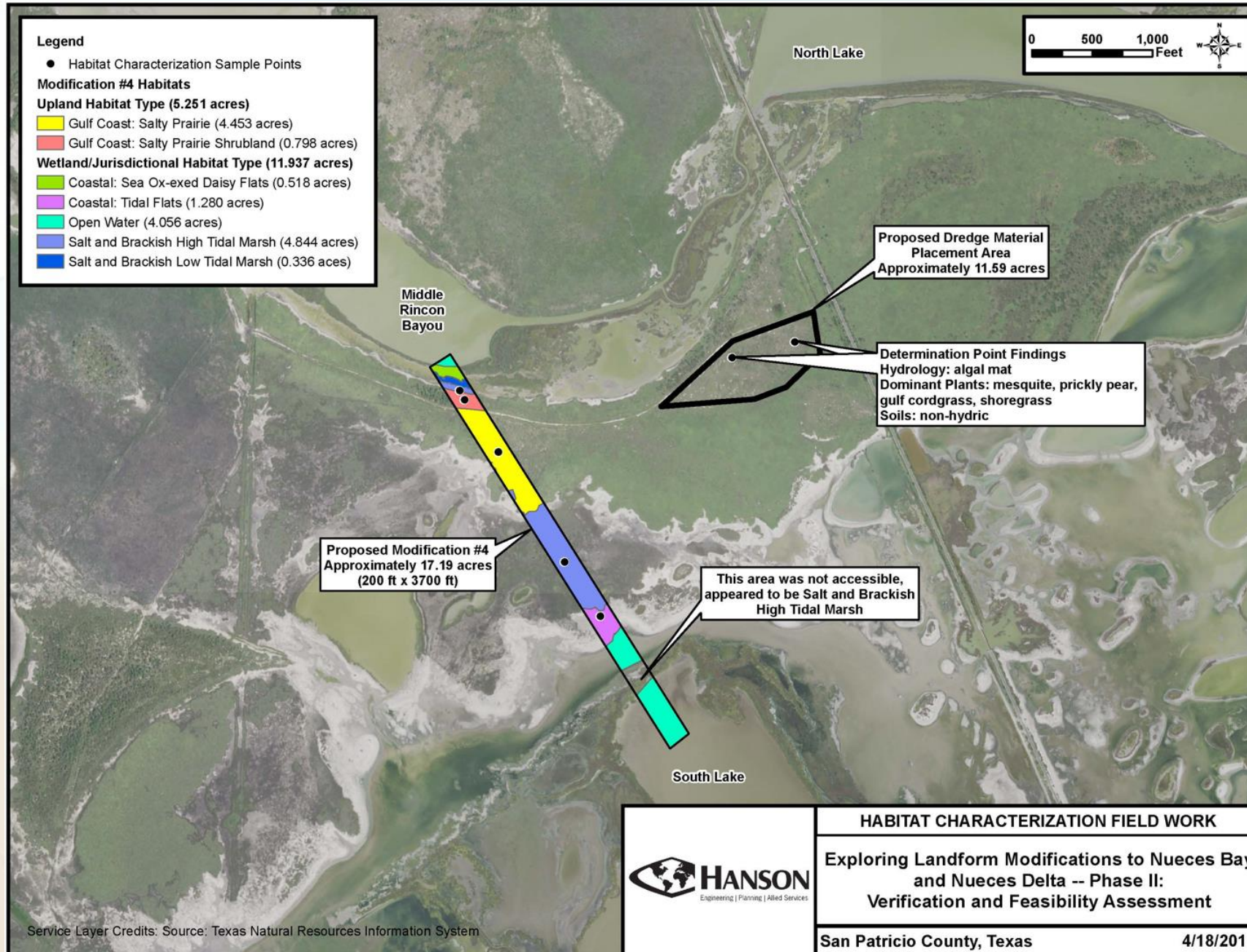


## Site #5





# Habitat Characterization: Site #4



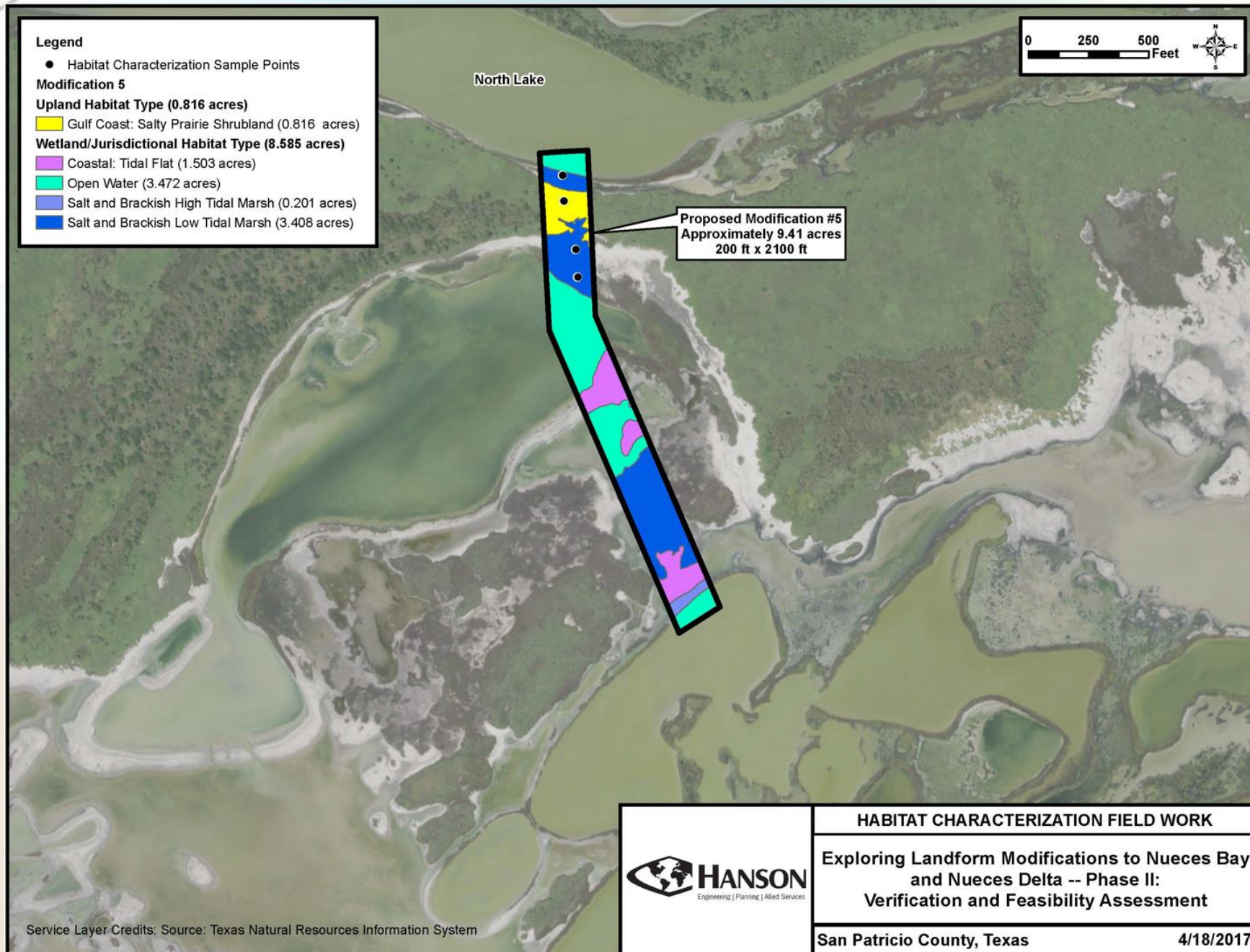


# Habitat Characterization: Site #4





# Habitat Characterization: Site #5





# Habitat Characterization: Site #5





# Questions?



11/17/2016